

EPA COMPLETES EFFORTS TO REDUCE SMOG ACROSS EASTERN U.S.

FACT SHEET

ACTION

- On April 1, 2004 the Environmental Protection Agency (EPA) finalized the second phase of its rule known as “the NO_x SIP Call Rule.” This action completes EPA’s response to several decisions from the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) relating to EPA’s rules to reduce ozone in the eastern United States.
- EPA originally issued the NO_x SIP Call Rule in October 1998 to reduce unhealthy air in the eastern half of the U.S. The original rule required 22 states and the District of Columbia to reduce emissions of nitrogen oxides (NO_x) that cross state boundaries, forming ground-level ozone in downwind states.
- Eight states challenged the rule and asked the D.C. Circuit to delay or “stay” the due date for plans known as state implementation plans (SIPs). These plans outline actions a state would implement to reduce air emissions of NO_x from certain sources. As an interim measure, the court issued an indefinite stay on May 25, 1999.
- On March 3, 2000, the D.C. Circuit Court issued a ruling that supported most portions of EPA’s NO_x SIP Call Rule. However, the court remanded several issues for the Agency to re-examine before moving ahead. In response, EPA separated the NO_x SIP Call Rule into two phases. Under Phase I of the rule, EPA moved ahead with those aspects supported by the court for 19 States and the District of Columbia.
- Today’s final rule, known as EPA’s “Phase II Rule” addresses the Court’s outstanding issues by:
 - (1) setting April 1, 2005 as the date for 19 States and the District of Columbia to submit to EPA their SIPs for Phase II of the NO_x SIP Call, and for Georgia and Missouri to submit SIPs meeting the full NO_x SIP Call;
 - (2) defining “electric generating units” (EGUs) to exclude certain small units known as “cogeneration units” from the NO_x SIP Call and Section 126 rulemakings;

Cogeneration units produce and use or sell heat and electricity.
 - (3) establishing a control level of 82 percent for large natural gas-fired stationary internal combustion engines, and 90 percent for diesel and dual fuel stationary internal combustion engines;
 - (4) excluding portions, known as the “coarse grid”, of Georgia, Missouri, Alabama and Michigan from the NO_x SIP Call;

Modeling for the NO_x SIP Call was done by drawing grids across most of the eastern half of the U.S. The grids used were either “coarse” grids or “fine” grids. Modeling in the “fine” grids had a higher resolution and included a smaller area than the “coarse” grids. Portions of the eastern U.S. could not be included within the fine grid due to computer constraints, including the excluded portions of these states. The Court ruling focused on Georgia and Missouri, but the same issue applies to Alabama and Michigan.
 - (5) revising statewide emissions budgets (allowed emissions of NO_x into the air) in

the NOx SIP Call to reflect issues (3) through (4) above;

- (6) setting a compliance date of May 1, 2007, for all Phase II sources including sources in Georgia and Missouri; and
- (7) excluding Wisconsin from NOx SIP Call requirements. The court determined that the available data did not support including that state under the 1-hour ozone standard .

BACKGROUND

- NOx is a primary ingredient in the formation of ground-level ozone pollution (smog). Facilities that emit NOx in upwind states contribute to smog formation in downwind States. When inhaled – even at very low levels – ground-level ozone can cause acute respiratory problems, aggravate asthma, reduce lung capacity, inflame lung tissue, and impair the body’s immune system.
- EPA’s efforts to reduce smog across the eastern U.S. include three actions addressed by the D.C. Circuit:
 - (1) A regulation, known as the NOx SIP Call, originally requiring 22 states and the District of Columbia to submit to EPA state implementation plans (SIPs) outlining strategies to reduce regional transport of ozone through reductions in NOx air emissions;
 - (2) Technical Amendments to the NOx SIP Call revising the NOx emissions budgets, the maximum amount of NOx emissions allowed for that state during the “ozone season” (May 1 through Sept. 30 each year) beginning in 2007; and
 - (3) The Section 126 Rule in which EPA partially approved petitions filed by several Northeastern states under Section 126 of the Clean Air Act. The petitions asked EPA to set emissions limits for power plants and other sources of NOx in certain upwind states.
- The NOx SIP Call and Section 126 Rule will help states meet the ozone standard. These reductions will improve air for more than 100 million people -- including people in both downwind states and the states where sources are making the reductions.
- The NOx SIP Call will reduce NOx emissions by approximately 1 million tons per year. Phase I of the SIP Call will achieve about 90% of these emissions reductions, and Phase II will achieve the final 10% of the reductions.
- EPA issued the NOx SIP Call Rule in September 1998. The original rule required 22 states and the District of Columbia to develop and implement plans to reduce NOx emissions that cross state boundaries, forming ground-level ozone in downwind states.
- The final rule did not mandate which sources must reduce pollution. States have the ability to meet the requirements of this rule by reducing emissions from the industrial sources they choose. However, utilities and other large industrial facilities are the most likely sources of NOx emissions reductions. The NOx SIP Call includes a model NOx Budget Trading Program that allows states to achieve the required emissions reductions in a highly cost-effective way.

- The model NOx Budget Trading Program sets emissions limits for the affected facilities in the form of NOx “allowances.” One allowance authorizes the emission of one ton of NOx. Each source will be allocated a specific number of allowances per year.
- Allowances may be bought, sold, or traded between the participating facilities and other private parties. Trading allows industry flexibility while ensuring that overall emissions are reduced. Sources also may receive credit for achieving reductions earlier than required and may “bank” the resulting allowances for future use.
- Eight states challenged the rule in the D.C. Circuit Court. As an interim measure, the court issued an indefinite stay on May 25, 1999.
- On March 3, 2000, the D.C. Circuit Court generally upheld the rule for 19 states and D.C., but found that the record did not support the inclusion of Wisconsin or portions of Georgia and Missouri.
- The Court also found that EPA had not provided adequate notice before including a small class of units in its definition of electric generating unit (EGU). In addition, the Court found that EPA had not provided adequate notice on the emissions reduction level assumed for large, stationary internal combustion engines.
- In a May 15, 2001 court decision on the Section 126 Rule, and a June 8, 2001 court decision on the NOx SIP Call Technical Amendments, the court remanded the EGU growth **factor** to EPA for further consideration. This issue was addressed separately in an action published May 1, 2002. **A decision for the DC Circuit Court on the EGU growth factor is expected in Spring 2004.**
- This phase (Phase II) of the NOx SIP Call was proposed on February 22, 2002.
- The Court lifted the stay on June 22, 2000. As a result, the District of Columbia and the 19 affected States submit revised SIPs in two phases: The first phase plans, due October 30, 2000, were required to contain the measures the states use to address the portion of the NOx budgets upheld by the Court’s decision.
- All of the participating states and the District of Columbia have submitted Phase I SIPs. EPA has given final approval to 17 of these SIPs and conditional final approval to 2 SIPs. We have proposed conditional approval for one state.
- An August 2000 Court ruling set May 31, 2004 as the compliance date for the implementation of Phase I. Many states in the northeast participating in a group known as the Ozone Transport Commission starting reducing NOx emissions May 1, 2003 – the original compliance date for the NOx SIP Call Rule.

ELECTRICITY SUPPLY

- Before issuing the NOx SIP Call, EPA examined the impact of the rule on the reliability of the country’s electricity supply. As a result of that examination, EPA anticipates that installation of the emission controls required by the NOx SIP Call would not cause or exacerbate electricity-availability problems, even during the summer when demands are high.

- Some affected electric power companies may reduce NOx emissions by installing systems known as *selective catalytic reduction*, or SCR, on individual boilers. EPA anticipates that SCR would be installed on about 10 percent of affected boilers.
- Most SCR systems can be built next to a boiler while the boiler continues to operate. The boiler only needs to be shut down long enough to connect the SCR device. Companies normally install such controls when the units are shut down to perform other routine maintenance –which is not done during the summer.
- The multi-State trading program will allow sources to purchase allowances if they find it more economical than installing post-combustion control equipment, or if they experience unexpected delays in installing controls.
- As an added safeguard against reliability problems, the NOx SIP Call Rule and Section 126 Rule allow states to use a compliance supplement pool to assist facilities that experience unexpected problems installing the necessary equipment. This pool contains credits that equal more than one third of a single year's NOx budget. To avoid electricity supply problems, facilities can either buy these credits from a facility that reduced its emissions early or be given these credits by the State.

FOR MORE INFORMATION

- To download a copy of the proposal and this final rule, go to <http://www.epa.gov/ttn/NAAQS/rto> .
- To download a copy of the original NOx SIP Call Rule, the NOx SIP Call Technical Amendments, and the Section 126 Rule go to <http://www.epa.gov/ttn/NAAQS/rto> .
- To download a copy of the Court's March 3, 2000 and June 22, 2000 rulings, go to the March 2000 and June 2000 Sections on <http://pacer.cadc.uscourts.gov/common/opinions/> . To download a copy of the Court's May 15, 2001 and June 8, 2001 rulings, go to May 2001 and June 2001 at the same website.